



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/597,574

10/28/2007

John G. Hildebrand

CCPC 0122 PUSA3

3032

50764

7590

08/10/2009

BROOKS KUSHMAN P.C.
1000 TOWN CENTER
TWENTY-SECOND FLOOR
SOUTHFIELD, MI 48075

EXAMINER

CHEN, CAI Y

ART UNIT

PAPER NUMBER

2425

MAIL DATE

DELIVERY MODE

08/10/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/597,574	Applicant(s) HILDEBRAND ET AL.	
	Examiner CAI CHEN	Art Unit 2425	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 May 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 3-15 and 29-34 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 3-15, and 29-34 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

Applicant's arguments filed 3-15, and 29-34 have been fully considered but they are not persuasive.

Regarding claim 3, on page 10-11 of the Remarks dated on 05/29/2009, applicant traverses the rejection regarding to the combination of Dureau and Chen,

In response the examiner respectfully disagrees, In *KSR*, the Supreme Court emphasized "the need for caution in granting a patent based on the combination of elements found in the prior *art*," *Id*, at 1739, and discussed circumstances in which a patent might be determined to be obvious. *KSR*, 127 S. Ct. at 1739 (citing *Graham v. John Deere Co.*, 383 U.S. 1, 12 (1966)). The Court reaffirmed principles based on its precedent that "[t]he combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results." *Id*. The operative question in this "functional approach" is thus "whether the improvement is more than the predictable use of prior art elements according to their established functions." *Id*. at 1740. In this case, Dureau discloses demultiplexing the first transport stream to recover first payload (MPEG 2 data) and second payload (MPEG 4 data) (para. 34-35, and 39), and transcoding the MPEG 4 data payload to MPEG 2 data payload (Fig. 4-6, para. 32-33, para. 35-38, para. 43-44, and para. 47). Dureau does not explicitly disclose multiplexing the first payload and the transcoded second payload to a second transport stream. The examiner is only bring the concept of

Art Unit: 2425

multiplexing the first payload and the transcoded second payload to a second transport stream by Chen as illustrated in Fig. 1 (para. 14, para. 21-22) to yield a predictable result of delivering the desirable data payload to user's home equipments in Dureau (Fig. 3) so the data payload is compatible to the home equipments and therefore displaying to the user.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 3-5, 13-15, 29, and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dureau in view of Chen (US 2005/002253 A1)

Regarding claim 3, Dureau discloses a method of transcoding dissimilar payloads carried in a first transport stream (abstract, para. 35), the method comprising:

demultiplexing the first transport stream to recover first and second payloads (para. 34-35, and 39, service provider to transport the content data contains HTML data, MPEG 1 data, MPEG 2 data, and MPEG 4 data are being demultiplexed at the set top box, first payload refers to MPEG 2, second payload refers to MPEG 4 data);

Art Unit: 2425

transcoding the second payload to a protocol associated with the first payload if a protocol associated with the second payload is dissimilar from the protocol associated with the first payload (Fig. 4-6, abstract, para. 32-33, para. 35-38, para. 43-44, para. 47, the MPEG 4 data payload is transcoded into MPEG 2 data format for compatibility and where MPEG 2 refers as first payload, and MPEG 4 is second payload);

Dureau does not explicitly disclose multiplexing the first payload and the transcoded second payload to a second transport stream.

Chen teaches multiplexing the first payload and the [transcoded] second payload to a second transport stream (Fig. 1, para. 14, para. 21-22).

It would be obvious to one of ordinary in the art at the time of invention to modify Dureau to include multiplexing the first payload and the [transcoded] second payload to a second transport stream, as taught by Chen, in order to deliver the desire payload to user's home equipments [in Dureau (Fig. 3)] so the data payload is compatible to the home equipments and therefore displaying to the user.

Regarding claim 4, Dureau in view of Chen discloses further comprising associating the first payload with MPEG-2 protocols and associating the second payload with AVC protocols such the second payload is transcoded to MPEG-2 protocols (Dureau, Fig. 4-6, abstract, para. 32-33, para. 35-38, para. 43-44, para. 47, AVC protocol standard can be MPEG 4 protocol, thus if the payload for

Art Unit: 2425

MPEG 4 (second payload) is not compatible then the MPEG 4 payload will be transcoded into MPEG 2 payload (first payload) format).

Regarding claim 5, Dureau in view of Chen further discloses associating the AVC protocols with MPEG-4 protocols (Dureau, para. 35).

Regarding claim 13, Dureau in view of Chen further discloses associating the first transport stream with MPEG-2 protocols (Dureau, para. 35).

Regarding claim 14, Dureau in view of Chen further discloses determining if the protocol associated with the second payload is dissimilar from the protocol associated with the first payload as a function of instructions associated with the MPEG-2 protocols of the first transport stream (Dureau, Fig. 4-6, abstract, para. 32-33, para. 35-38, para. 43-44, para. 47).

Regarding claim 15, Dureau in view of Chen further discloses associating the first and second transport streams with MPEG-2 protocols (The video data transport streams are transcoded to the target/desire (MPEG-2) format, see Dureau, Fig. 4-6, abstract, para. 32-33, para. 35-38, para. 43-44, para. 47).

Regarding claims 29 and 32, the instant claims are analyzed with respect to claim 1.

Art Unit: 2425

3. Claims 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Dureau in view of Chen and further in view of Kadono (US 2004/0246373 A1)

Regarding claim 6, Dureau discloses all limitation of claim 1.

Dureau in view of Chen does not explicitly disclose associating the AVC protocols with H.264 protocols.

Kadono teaches associating the AVC protocols with H.264 protocols (para. 5).

It would be obvious to one of ordinary in the art at the time of invention to modify Dureau in view of Chen to include associating the AVC protocols with H.264 protocols, as taught by Kadono, in order to use the industry well known standardization format in picture coding method.

4. Claims 7-8, 30, and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dureau in view of Chen and further in view of Candelore (US 2003/0046686 A1).

Regarding claim 7, Dureau in view of Chen discloses all limitation of claim 3.

Dureau in view of Chen does not explicitly disclose decrypting conditional access (CA) encryption of the first transport stream prior to demultiplexing.

Art Unit: 2425

Candelore teaches disclose decrypting conditional access (CA) encryption of the first transport stream prior to demultiplexing (Fig. 2, 5, and 8, el. 272-el. 288, para. 40-41, para. 60-64, para. 84-85, para. 94).

It would be obvious to one of ordinary in the art at the time of invention to modify Dureau in view of Chen set top box to include decrypting conditional access (CA) encryption of the first transport stream prior to demultiplexing, as taught by Candelore, in order to decrypt the TV signal so only the person is authorized can access the TV content (para. 40-41).

Regarding claim 8, Dureau in view of Chen and further in view of Candelore discloses decrypting the CA encryption of the first transport stream in a settop box (STB) (Candelore, Fig. 2, 5, and 8, el. 272-el. 288, para. 40-41, para. 60-64, para. 84-85, para. 94).

Regarding claim 30, Dureau in view of Chen discloses all limitation of claim 29.

Dureau in view of Chen does not explicitly disclose decrypting conditional access (CA) encryption of the first transport stream prior to demultiplexing.

Candelore teaches disclose prior to demultiplexing, encoding the first transport stream so as to be copy protected; and after encoding and prior to demultiplexing, decoding the first transport stream so as to no longer be copy protected (Fig. 2, 5, and 8, el. 272-el. 288, para. 40-41, para. 60-64, para. 84-85, para. 94).

Art Unit: 2425

It would be obvious to one of ordinary in the art at the time of invention to modify Dureau in view of Chen set top box to include disclose prior to demultiplexing, encoding the first transport stream so as to be copy protected; and after encoding and prior to demultiplexing, decoding the first transport stream so as to no longer be copy protected, as taught by Candelore, in order to ensure that the copy protected content is only accessed by the authorized persons (para. 40-41).

Regarding claim 33, the instant claim is analyzed with respect to claim 30.

5. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Dureau in view of Chen and further in view of Candelore and further in view of Hendricks (US 7,073,187).

Regarding claim 9, Dureau in view of Chen and further in view of Candelore discloses all the limitation of claim 8. Dureau in view of Chen and further in view of Candelore further discloses demultiplexing, transcoding, and multiplexing the first and second payloads in a card of the set top box (Dureau, para. 35, and 39, Fig. 4-6, abstract, para. 32-33, para. 35-38, para. 43-44, para. 47, Chen, Fig. 1, para. 14, para. 21-22, transcoding unit is circuit card in the set top box performing demultiplexing, transcoding, and multiplexing funtion).

Art Unit: 2425

Dureau in view of Chen and further in view of Candelore does not explicitly disclose [demultiplexing, transcoding, and multiplexing the payloads] in a card inserted into a card slot of [the STB].

Hendricks teaches [demultiplexing, transcoding, and multiplexing the payloads] in a card inserted into a card slot of [the STB] (Fig. 52 b, col. 12, lines 31-47, col. 13, lines 18-43).

It would be obvious to one of ordinary in the art at the time of invention to modify Dureau in view of Chen and further in view of Candelore set top box to include [demultiplexing, transcoding, and multiplexing the payloads] in a card inserted into a card slot of [the STB], as taught by Hendricks, in order to replace the card inserted to the set top box in case if it goes bad.

6. Claims 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dureau in view of Chen and further in view of Candelore and further in view of Hendricks (US 7,073,187) and further in view of Park (5,757,909).

Regarding claim 10, Dureau in view of Chen and further in view of Candelore and further in view of Hendricks discloses all limitation of claim 9, and further discloses decode the data stream prior to the demultiplexing, transcoding, and multiplexing (Dureau, Fig. 4, para. 6, para. 38-39, Chen, Fig. 1, para. 14 and para. 21, Hendricks, Fig. 52 b, col. 12, lines 31-47, col. 13, lines 18-43).

Art Unit: 2425

Dureau in view of Chen and further in view of Candelore and further in view of Hendricks does not explicitly disclose [decoding] copy protection of the first transport stream [in the card].

Park teaches [decoding] copy protection of the first transport stream [in the card] (Fig. 6-9, col. 13, lines 1-67, col. 14, lines 21-67).

It would be obvious to one of ordinary in the art at the time of invention to modify Dureau in view of Chen and further in view of Candelore and further in view of Hendricks to include [decoding] copy protection of the first transport stream [in the card], as taught by Park, in order to perform the illegal viewing and copy protection (col.14, lines 65-67).

7. Claims 11-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dureau in view of Chen and further in view of Candelore and further in view of Hendricks (US 7,073,187) and further in view of Park (5,757,909) and further in view of Orr (US 6,567,127 B1).

Regarding claim 11, Dureau in view of Chen and further in view of Candelore and further in view of Hendricks and further in view of park discloses all limitations of claim 10.

Dureau in view of Chen and further in view of Candelore and further in view of Hendricks and further in view of park does not explicitly discloses encoding copy protection to the second transport stream.

Art Unit: 2425

Orr teaches encoding copy protection to the second transport stream (Fig. 1, col. 3, lines 30-63).

It would be obvious to one of ordinary in the art at the time of invention to modify Dureau in view of Chen and further in view of Candelore and further in view of Hendricks and further in view of Park to include encoding copy protection to the second transport stream, as taught by Orr, in order to enhance the video data stream (col. 3, lines 50-52).

Regarding claim 12, Dureau in view of Chen and further in view of Candelore and further in view of Hendricks and further in view of park and further in view of Orr discloses transmitting the copy protection encoded second transport stream from the card to the STB (Dureau, Fig. 1-4, abstract, para. 33-36, Hendricks, Fig. 52b, col. 13, lines 16-43, col. 3, lines 30-col. 4, line 3, the encoded video stream is transferred to the set top box).

8. Claims 31 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dureau in view of Chen and in view of Candolre and further in view of Kubota (US RE38,236 E).

Regarding claim 31, Dureau in view of Chen and in view of Candolre discloses all limitation of claim 30.

Dureau in view of Chen and in view of Candolre does not explicitly disclose after multiplexing, encoding the second transport stream so as to be

Art Unit: 2425

copy protected; after multiplexing, decoding the second transport stream so as to no longer be copy protected; and after decoding the second transport stream, demultiplexing the second transport stream to recover the first payloads from the [transcoded] second payloads.

Kubota teaches after multiplexing, encoding the second transport stream so as to be copy protected (Fig. 2 and 4, el. 5, col. 5, lines 26-35);

after multiplexing, decoding the second transport stream so as to no longer be copy protected (Fig. 5 and 8, el. 12, col. 7, lines 37-43);

and after decoding the second transport stream, demultiplexing the second transport stream to recover the first payloads from the [transcoded] second payloads (Fig. 8, el. 14, col. 7, lines 37-67).

It would be obvious to one of ordinary in the art at the time of invention to modify Dureau in view of Chen and further in view of Candelore to include after multiplexing, encoding the second transport stream so as to be copy protected; after multiplexing, decoding the second transport stream so as to no longer be copy protected; and after decoding the second transport stream, demultiplexing the second transport stream to recover the first payloads from the [transcoded] second payloads, as taught by Kubota, in order to add the security for accessing the video content so the only authorized users are allowed to access the content (abstract).

Conclusion

Art Unit: 2425

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CAI CHEN whose telephone number is (571)270-5679. The examiner can normally be reached on 7:30 am to 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Pendleton can be reached on 571-272-7527. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2425

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/CAI CHEN/
Examiner, Art Unit 2425

/Brian T. Pendleton/
Supervisory Patent Examiner, Art Unit 2425